

6. (Amended) A method for producing transgenic poinsettia plants, comprising the steps of:

(a) incubating poinsettia plant tissue explants [capable of producing] that produce reddish epidermal callus on callus induction medium;

(b) culturing reddish epidermal callus on embryo induction medium comprising casein hydrolysate to form embryogenic callus;

(c)

B2 (i) introducing an expression vector into said incubating embryogenic callus to produce transformed embryogenic callus, wherein said expression vector comprises a selectable marker gene and a second foreign gene, or

[(c')] (ii) introducing two expression vectors into said incubating embryogenic callus to produce transformed embryogenic callus, wherein one of said expression vectors comprises a selectable marker gene, and wherein the second of said expression vectors comprises a second foreign gene[.];

(d) culturing said transformed embryogenic callus on selection medium;

(e) culturing said transformed embryogenic callus containing embryos on developmental medium;

(f) culturing said transgenic embryos on maturation medium; and

(g) recovering transgenic plants from said transgenic embryos.

39. (Amended) A method for producing transgenic poinsettia plants, comprising the steps of:

(a) incubating poinsettia plant tissue explants [capable of producing] that produce reddish epidermal callus in callus induction medium;

B3 (b) culturing embryogenic callus produced on said callus induction medium in liquid embryo induction medium;

(c) filtering the culture and culturing the filtrate in fresh liquid embryo induction medium;

(d) filtering the culture and culturing the filtrate on solid embryo induction medium;

(e) culturing embryos produced on said embryo development medium on maturation medium;

(f) culturing said embryos on callus induction medium;

(g) culturing epidermal callus produced on said callus induction medium on embryo induction medium to form embryogenic callus;

(h)

(i) introducing an expression vector into said embryogenic callus to produce transformed embryogenic callus, wherein said expression vector comprises a selectable marker gene and a second foreign gene, or

[h'] (ii) introducing two expression vectors into said embryogenic callus to produce transformed embryogenic callus, wherein one of said expression vectors comprises a selectable marker gene, and wherein the second of said expression vectors comprises a second foreign gene;

(i) culturing said transformed embryogenic callus on selection medium;

(j) culturing said transformed embryogenic callus containing embryos on developmental medium;

(k) culturing said transformed embryos on maturation medium; and

(l) recovering transgenic plants from said transgenic embryos.

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Please add the following new claims:

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2/21/01  
DFF --97. The method of claim 1, wherein said poinsettia plants of step (e) are fertile.

B4 98. The method of claim 6, wherein said poinsettia plants of step (g) are fertile.

99. The method of claim 39, wherein said poinsettia plants of step (l) are fertile.

100. The transgenic poinsettia plant of claim 73, wherein said plant is fertile.--

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